Department of Commerce
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Energy Policy Options

DRAFT as of JULY 9, 2010

State Energy Strategy

This is a "brainstorm" of options for energy policies to be recommended by the Washington State Energy Strategy; there is no qualification for a policy option to be on this list. Options are drawn from a wide range of sources including published literature, Advisory Committee members, government staff, and various other parties interested in the State Energy Strategy. * to the left of any policy option indicates that it is a candidate for inclusion in the 2010 Update. Four-character boldface codes in the *prior work* column (*e.g.* **T002** or **R004**) are index numbers from the bibliography of prior work.

	policy option title	*long description*	*implementation requirements*	*basis in prior work*	*notes*
transportation energy demand reduction (including land use policy)					
	electric vehicles	Incentives to promote faster penetration of EVs		Current law	
*	**road pricing**	Promote transportation financing methods, such as user fees, tolls, and pricing, that sustain maintenance, preservation, and operation of facilities and reflect the costs imposed by users.	Legislation required. Federal authorization required on interstates. Local governments may have some authority to act independently.	Transportation 2040 (**T002**, MPP-T-33)	Transportation Commission sets tolls once legislated.
	urban centers	direct growth at urban centers		Transportation 2040 (**T002**, MPP-DP-5 – MPP-DP-7)	
*	**model land use regulation**	Create model land use regulations for county and city governments that encourage renewable energy.	Existing Commerce authority & expertise, but not capacity.	Klickitat county experience; DSIRE database; Institute for Local Self Reliance research.	
	Land Use Team	Create a state and local government "Land Use Team" to provide technical assistance and recommend best practices for addressing climate change and energy efficiency in land use and transportation planning decisions.	Existing authority & capacity.		The Land Use Team could also offer model land use regulation as listed above.

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*	**GTEC**	Expand existing WSDOT *Growth and Transportation Efficiency Centers* program.	Existing WSDOT authority & expertise, but additional appropriation required.	WSDOT experience	
	rural transportation	Rural transportation requires different policy approaches than urban transportation – what are those policies?			
	GHG concurrency	Require counties and cities to identify GHG reduction goals in their comprehensive land use plans; and require regional transportation planning organizations to develop transportation plans that are consistent with these goals.			
	SEPA streamlining	Offer a streamlined SEPA process to land use proposals that incorporate climate change, energy efficiency and/or renewable energy.			
non-transport energy demand reduction (efficiency; includes decoupling)					
*	**residential energy efficiency financing**	PACE (property assessed clean energy) financing are clean energy retrofit loans attached to properties rather than individuals, paid back through the property tax bill. Any other arrangements where payments appear on a tax or utility bill.	Requires legislation. Model programs and some financing available from U.S. DOE.	**S001**	Ameliorates longer payback times. Requires (passive) cooperation from lenders.
	rental housing standards	Minimum efficiency requirements for rental housing, esp. relating to insulation.		Experience in Maine & Wisconsin.	
*	**commercial and industrial energy efficiency financing**	Revolving loan funds; credit enhancement; direct financing of public facilities	Depends on mechanism. Utilities already administer (underutilized) revolving loan funds. Credit programs limited by state constitution (utilities are only public entity allowed to offer credit to private entities). Direct financing of public facilities requires appropriation.		Ameliorates longer payback times.

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*	**building codes**	tighten building energy codes for conservation & efficiency	Existing State Building Code Council process.	Sixth Plan CONS-5 (**E002**, p.AP-3)	
	ZEB	"Zero Emissions Buildings:" All new buildings built in 2031 induce no fossil fuel-related greenhouse gas emissions.		current law (E2SSB 5854)	This is an affirmation of existing law, not a new initiative. Coordinating carefully with the existing law will help to harmonize energy policy.
	local building codes	Encourage local governments to adopt model building codes more stringent than state code.	Local governments may not have authority to enact more stringent residential codes.	CPUC 2008 (**C006**, §12 strategy 1-1)	
	decoupling	Decouple utility profits from volume of sales.		Lesh 2009 (**E004**)	Awaiting results of UTC process.
	appliance efficiency standards	WA to adopt standards where it has the authority; encourage federal standards where it does not.		6th Power Plan	
promotion or financing of renewable energy					
	small renewables	encourage development of small-scale renewables		Sixth Plan GEN-2 (E002, pp. AP-10 – AP-11)	may be too general – develop sub-options.
	RPS	renewable portfolio standards			
	intra-state transmission for renewables	Overcome current obstacles to wheeling power from rural WA to load centers			
	feed-in tariff	Provide incentive for small renewables by guaranteeing certain prices on generated electricity and long-term contracts.		Bills in prior legislatures; a version passed by OR	Recent study (NARUC/NREL) indicates deep legal problems
	biorefinery	Promote a major biorefinery pilot project in Washington State		Mason et al 2009 (**R004**, p.144)	
	cellulosic conversion technologies	Enable use of Washington's abundant woody biomass resource through developing energy conversion technologies able to accept cellulosic feedstocks.		Mason et al 2009 (**R004**, p.145)	

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	solar thermal	Make sure solar thermal does not get lost in the shadow [*sic*] of solar PV.			
advanced nuclear, coal and natural gas					
	nuclear energy	develop nuclear energy generally (including Gen. III technologies) Maybe focus on modular units; 1000+ mw units of any kind are too big for NW		(6th Power Plan analysis;) Myriad of studies of costs	
	advanced nuclear	Gen. IV technologies			
	carbon capture and storage				
	Centralia displacement	Displace coal-fired electric generation with natural gas and wind.			Await outcome of governor's negotiations before action.
carbon pricing or fossil fuel pricing					
*	**carbon tax**	Levy a state-level carbon tax with proportionate reductions in property, B&O or sales taxes.	Legislation required. 18th Amendment challenge possible.	Bauman 2010 (**G002**)	Revenue "recycling."
	carbon tax (BC)	Carbon tax modeled after British Columbia experience.		BC Ministry of Finance 2008 (**T005**)	Also a revenue "recycling" system.
	cap-and-trade	Limit statewide greenhouse gas emissions to maximum levels, and auction a corresponding quantity of allowances.			Requires same decisions about how to recycle revenues as a tax system.
*	**cap-and-trade (RGGI)**	Limit greenhouse gas emissions from electric sector to maximum levels, and grant allowances with a similar structure to RGGI.	Legislation probably required, though Ecology may have some authority over stationary sources under state Clean Air Act.		Possibly combine with fuel carbon tax to cover transportation sector.
	carbon-weighted tolling	Pilot program: In select urban areas with automated tolling (using transponders) scale the toll by estimated fuel consumption per mile.			Fuel consumption presumably based on vehicle type & speed.

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	vehicle registration fee	Assess a fee at registration based on estimated GHG emissions.			GHGs estimate from vehicle model & year (already collected) and odometer reading (not yet collected).
grid, smart grid, distributed generation					
*	**efficient grid**	Deploy technologies making best use of existing electric transmission and distribution infrastructure	BPA controls majority of transmission grid. Encouraging transmission & distribution efficiency at local utilities requires different mechanisms for public & private utilities.		
	regulatory review	Determine whether state wishes to encourage electricity generation for export. What are our regulatory burdens & advantages?			
	distributed generation initiative	A focused and coherent program of policies and outreach to encourage and facilitate electrical power generation in homes and commercial buildings (e.g., building-scale solar, wind, etc.)			
	net metering	Raise qualifying ceiling; allow banking.			
	smart grid technology hub	Encourage businesses engaged in the manufacture of smart grid-related hardware and software to locate in Washington State.			
crosscutting initiatives					
*	**state leadership**	Make the state a buyer of preferred technologies.	Authority at all state agencies, but highly constrained by budget.		Authority to select preferred providers may be limited in some cases.
*	**energy policy harmonization**	Harmonize existing energy policies to be internally consistent and support efficient implementation.	Harmonization exercise within Commerce capacity; but implementation likely to require legislation.	*not applicable*	A first step of harmonizing within sub-fields, especially electricity policies and biofuels policies, might be necessary.

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*	**streamlined permitting**	Create fast processes for permitting of renewable energy and electric infrastructure.	Unknowable without first identifying the permitting roadblocks to be cleared. Legislation possibly required.		EFSEC is already allowed jurisdiction over renewable projects of any size (the project may opt-in). Local governments may need to have complementary processes for small renewables.
	system benefits charge	A charge applied across all utility bills and placed in a trust, similar to Energy Trust of Oregon.			The SBC funds could be applied to efficiency, renewables, or other energy-related topics.
	R&D	Investment of energy-related revenues (SBC, carbon tax, etc.) into new energy technology development.			
	consumer education	Increase consumer literacy energy use decisions, impacts of those decisions on climate change, local air & water quality, energy independence. Also work toward a greater tolerance for longer payback times.			
	workforce skills	Ensure that the skillsets necessary to provide conservation & retrofit services, maintain and expand existing infrastructure, and develop clean energy technologies, are available in the Washington workforce.			
	manufacturing sector	Deploy policies that retain Washington's manufacturing base by applying it to new energy technologies.			
	international examples	Look outside U.S. for ideas.			
*	**Export Initiative**	Expand on the governor's Export Initiative by identifying clean energy economy products with high international demand, and encouraging development of those industries in Washington.			Ties closely with the work of the CELC.
	commercialization support	Offer support for Washington businesses to bring new technologies through the "valley of death" between successful R&D and full commercialization.			